



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### SOUTHWEST REGIONAL OFFICE

Douglas W. Domenech  
Secretary of Natural Resources

355 Deadmore Street, P.O. Box 1688, Abingdon, Virginia 24212  
(276) 676-4800 Fax: (276) 676-4899  
[www.deq.virginia.gov](http://www.deq.virginia.gov)

David K. Paylor  
Director

Dallas R. Sizemore  
Regional Director

June 17, 2011

Mr. Jeffrey Uecker  
Plant Manager  
Masco Cabinetry LLC  
P.O. Box 259  
Atkins, Virginia 24311

Location: Smyth County  
Registration No.: 10830

Dear Mr. Uecker:

Attached is a renewal Title V permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Masco Cabinetry LLC of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

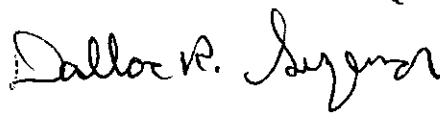
Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director  
Department of Environmental Quality  
P. O. Box 1105  
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact the regional office at (276) 676-4800.

Sincerely,



Dallas R. Sizemore  
Regional Director

Attachments: Permit

NSPS, Subpart Dc  
NESHAP, Subparts A, JJ, DDDD, DDDDD  
Source Testing Report Format

cc: Director, OAPP (electronic file submission)  
Manager, Data Analysis (electronic file submission)  
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III



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Regional Director

### Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Masco Cabinetry LLC	Registration Number:	10830
Facility Name:	Masco Cabinetry LLC - Atkins Plant 12	Permit Number:	SWRO10830
Facility Location:	6373 Lee Highway		
	Atkins, Virginia		

This permit includes the following programs:

### Federally Enforceable Requirements - Clean Air Act (Sections I through IX)

June 30, 2011  
Effective Date

June 29, 2016  
Expiration Date

  
Dallas R. Sizemore, Regional Director

June 17, 2011  
Signature Date

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## **I. Facility Information**

Permittee  
Masco Cabinetry LLC  
P.O. Box 259  
Atkins, Virginia, 24311

Responsible Official  
Jeffrey Uecker  
Plant Manager

Facility  
Masco Cabinetry LLC - Atkins Plant 12  
6373 Lee Highway  
Atkins, Virginia, 24311

Contact Person  
Charlie Vipperman  
Safety, Health & Environmental Supervisor  
(276) 782-4510

**County-Plant Identification Number:** 51-173-00071

**Facility Description:** NAICS 337110 – Wood Kitchen Cabinet and Countertop Manufacturing

The operations at the facility consist of lumber drying, processing and handling, two boilers, and a wood surface coating line. Green lumber is received at the plant from local sources or another plant. Much of the lumber is graded and dried at the facility, however, the facility may receive a significant quantity of pre-dried lumber. Air drying, two pre-dryers, and five kilns are used to lower the moisture content of the green lumber to 6-8%. The kilns and pre-dryers operate using steam generated from one 27.8 MMBtu/hr Industrial Boiler Company wood/oil-fired boiler (equipped with a multicyclone particulate collector) and one 17.8 MMBtu/hr Superior Boiler Works oil/natural gas-fired boiler. Waste from green lumber processing is pneumatically transferred to a trailer via a closed-loop cyclone.

The dried wood is processed using planers, saws, sanders, tennons, and moulding machines typical of this industry. In the "rough end", defects, offal, and strip stock shavings from machining operations are conveyed to a wood hog machine where the wood is reduced in size and transferred to a storage silo via an enclosed pneumatic conveyance system. Also, wood dust collected in the seven fabric filters that serve most woodworking operations at the plant is transferred to the storage silo. The wood dust is stored in the silo until it is burned in the facility's wood-fired boiler. When the silo is full, the excess wood dust is conveyed via a closed-loop cyclone system to a truck trailer for transfer off-site. Polyvinyl acetate glues are used to assemble the cabinet doors.

In the finishing process, a series of sealers, topcoats, and stains are applied to the cabinet doors using ten spray booths equipped with electrostatic, HVLP, or air-assisted airless spray guns and paint filters. Two topcoat spray booths (including flash and drying areas) and two sealer spray booths are controlled by a regenerative thermal oxidizer. Two wiping machines are used to apply stains to some products. The wipe machines are equipped with paint filters for controlling any particulates that may escape the process. The cabinet doors are dried in steam-heated ovens. The coating materials are stored in 9 bulk storage tanks, as well as drums and smaller containers. Wire hooks used to hold the cabinet doors are cleaned using acetone that is recycled and reclaimed by the manufacturer. The finished product is packaged and warehoused for shipment by trucks.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
B1		Industrial Boiler Company wood, oil-fired boiler	27.8 x 10 <sup>6</sup> Btu/hr	Western Precipitation Multiclone		PM/PM10	10/06/08 as amended 01/04/11
B2		Superior Boiler Works oil & gas- fired boiler	17.8 x 10 <sup>6</sup> Btu/hr				10/06/08 as amended 01/04/11
<b>Woodworking Equipment Subject to 9 VAC 5 Chapter 50 (New or Modified)</b>							
W1		Woodworking Equipment	32 x 10 <sup>6</sup> Bd-ft/yr	7 Fabric filters - 4 Carter Day, 1 Donaldson Day, 1 Waltz Holst, 1 Donaldson 484RF10	BH1-7	PM/PM10	10/06/08 as amended 01/04/11
W1		Green Lumber Processing Equipment		Closed Loop Cyclone	DCT1	PM/PM10	10/06/08 as amended 01/04/11



Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Furniture Finishing Equipment</b>		<b>Subject to 9 VAC 5 Chapter 50 (New or Modified)</b>					
F1		10 Spray Booths		Dry Filters		PM/PM10	10/06/08 as amended 01/04/11
F1		2 Topcoat Spray Booths & 2 Sealer Booths		Regenerative Thermal Oxidizer		VOC	10/06/08 as amended 01/04/11
<b>Wood Drying Equipment</b>		<b>Subject to 9 VAC 5 Chapter 50 (formerly Part 5) (New or Modified)</b>					
D1		1 predryer, 2 kilns	predryer - 1.4 x 10 <sup>6</sup> Bd-ft; 2 kilns- 90,000 Bd-ft each	----	----	----	10/06/08 as amended 01/04/11
D2		1 predryer, 3 kilns	predryer - 1.4 x 10 <sup>6</sup> Bd-ft; 2 kilns- 90,000 Bd-ft each; 1 kiln - 45,000 Bd-ft	----	----	----	10/06/08 as amended 01/04/11

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

### **III. Fuel Burning Equipment Requirements – (B1 & B2)**

#### **A. Limitations**

1. Except as specified in this permit, the Superior Boiler Works boiler (B2) and the Industrial Boiler Company boiler (B1) are to be operated in compliance with federal emissions requirements under 40 CFR 60, Subpart Dc.  
(9 VAC 5-50-410, 40 CFR 60.40c, and Condition 20 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. Particulate matter emissions from the Industrial Boiler Company boiler (B1) shall be controlled by a Western Precipitation Multicyclone dust collector, or equivalent. The collector shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 3 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
3. The approved fuels for the Industrial Boiler Company boiler (B1) are distillate oil and wood. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 17 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
4. The approved fuels for the Superior Boiler Works boiler (B2) are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 18 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
5. The maximum sulfur content of the oil to be burned in the boilers shall not exceed 0.5 percent by weight per shipment.  
(9 VAC 5-50-410, 9 VAC 5-80-110, and Condition 19 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
6. The Industrial Boiler Company boiler shall consume no more than 12,600 tons per year of wood fuel and 500,000 gallons per year of distillate oil, calculated as the sum of each consecutive 12-month period.  
(9 VAC 5-80-1180 and Condition 15 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

7. The Superior Boiler Works boiler (B2) shall consume no more than  $156 \times 10^6$  cubic feet per year of natural gas, and 75,600 gallons per year of distillate oil, calculated as the sum of each consecutive 12 month period.  
(9 VAC 5-80-1180, 9 VAC 5-80-110 A, 9 VAC 5-80-110 B, and Condition 14 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
8. Emissions from the operation of the Industrial Boiler Company boiler (B1) while firing wood fuel or distillate oil shall not exceed the limits specified below:

Particulate Matter	4.8 lbs/hr	15.5 tons/yr
PM-10	4.3 lbs/hr	14.0 tons/yr
Sulfur Dioxide	14.4 lbs/hr	20.0 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	13.6 lbs/hr	48.2 tons/yr
Carbon Monoxide	16.7 lbs/hr	54.2 tons/yr
Volatile Organic Compounds	0.5 lbs/hr	1.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number III.A.6. Annual emissions shall be calculated as the sum of each consecutive 12-month period.  
(9 VAC 5-50-10 D, 9 VAC 5-40-900, 9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 30 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

9. Emissions from the operation of the Superior Boiler Works boiler (B2) shall not exceed the limits specified below:

Particulate Matter	0.4 lbs/hr	0.7 tons/yr
PM-10	0.4 lbs/hr	0.7 tons/yr
Sulfur Dioxide	9.3 lbs/hr	2.8 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	2.6 lbs/hr	8.6 tons/yr
Carbon Monoxide	1.5 lbs/hr	6.7 tons/yr

Annual emissions shall be calculated as the sum of each consecutive 12-month period.  
(9 VAC 5-50-10 D, 9 VAC 5-50-260, 9 VAC 5-40-900, 9 VAC 5-80-110 B, and Condition 29 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

10. Visible emissions from the Industrial Boiler Company boiler (B1) exhaust shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(40 CFR 60.43c, 9 VAC 5-50-260, 9 VAC 5-50-80, 9 VAC 5-80-110 K, and Condition 24 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
11. Visible emissions from the Superior Boiler Works boiler (B2) exhaust shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction. Visible emission evaluations shall be conducted on the Superior Boiler Works boiler (B2) stack. The details of the test shall be arranged with the Director, Southwest Regional Office.  
(9 VAC 5-50-260, 9 VAC 5-50-410, 9 VAC 5-80-110 K, and Condition 23 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
12. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.  
(9 VAC 5-50-50, 9 VAC 5-50-20 E, 9 VAC 5-80-110 and Condition 33 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

#### **B. Monitoring and Recordkeeping**

1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of distillate oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
  - e. The sulfur content of the oil.  
(40 CFR 60.48c, 9 VAC 5-50-410, 9 VAC 5-80-110, and Condition 19 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

2. The permittee shall perform a visible emission observation of the Industrial Boiler Company boiler (B1) exhaust once each calendar week when the boiler is operated for a period of time exceeding the time required for normal start-up. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If during the evaluation, visible emissions (condensed water vapor/steam is not a visible emission) are observed, a visible emissions evaluation (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9 shall be conducted. The VEE shall be conducted for a minimum period of six (6) minutes. If any of the observations exceed the applicable opacity limit, the observation period shall continue until a total of sixty (60) minutes of observation has been completed. A Method 9 evaluation shall not be required if the visible emissions condition is corrected in a timely manner such that no visible emissions are present; the emissions unit is operating at normal operating conditions; and the cause and corrective measures taken are recorded. If excess emissions are expected for greater than one hour, DEQ malfunction procedures shall be implemented.  
(9 VAC 5-50-20 and 9 VAC 5-80-110 K)
3. The permittee shall conduct an annual internal inspection on the multicyclone to insure structural integrity.  
(9 VAC 5-80-110)
4. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
  - a. Amount of each fuel combusted in the Superior Boiler Works (B2) and Industrial Boiler Company (B1) boilers on a monthly and annual basis. Fuel consumption is calculated as the sum of each consecutive 12 month period.
  - b. The number of hours of operation of each boiler per year.
  - c. The log of annual inspections for the multicyclone.
  - d. The DEQ approved, pollutant-specific emission factors and the equations used to demonstrate compliance with boiler emission limits.
  - e. Hourly, monthly, and annual emissions estimates from each unit using the above factors. Hourly emissions shall be estimated by dividing the monthly emissions by hours of operation for each unit.
  - f. The log of weekly inspections and the results of all VEEs for the Industrial Boiler (B1) stack.
  - g. All fuel supplier certifications.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 40 CFR 60.48c, and 9 VAC 5-80-110 and Condition 34 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

5. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler(s). These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-80-110 and Condition 33 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

#### **C. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 12 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate methods in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)

#### **D. Reporting**

1. The permittee shall submit fuel quality reports to the Director, Southwest Regional Office no later than March 1 and September 1 following each calendar semiannual period. If no shipments of distillate oil were received during the calendar semiannual period, the report shall consist of the dates included in the calendar semiannual period and a statement that no oil was received during the period. If distillate oil was received during the calendar semiannual period, the reports shall include:
2. The dates included in the calendar semiannual period (January 1 to June 30, and July 1 to December 31);
3. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar semiannual period or a summary from each fuel supplier that includes the information specified in Condition III.B.1 for each shipment of distillate oil; and,

4. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.  
(40 CFR 60.48c, 9 VAC 5-50-410, and 9 VAC 5-80-110)

#### **IV. Woodworking Equipment Requirements – (W1)**

##### **A. Limitations**

1. Particulate matter emissions from the dry wood woodworking equipment (W1) shall be controlled by four Carter Day baghouses, or equivalent, one Donaldson Day baghouse, or equivalent, one Waltz Holst baghouse or equivalent, and one Donaldson 484RF10 baghouse or equivalent (BH1-7). The fabric filters shall be provided with adequate access for inspection.  
(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 C, and Condition 6 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. Particulate matter emissions from the green wood woodworking equipment (W1) shall be controlled by closed-loop operation through a cyclone. The cyclone shall be provided with adequate access for inspection.  
(9 VAC 5-50-260, 9 VAC 5-80-10 H, 9 VAC 5-80-110 C, and Condition 5 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
3. Fugitive particulate matter emissions from collecting and transferring of sawdust and shavings to/from storage sites shall be controlled by covering all conveyors.  
(9 VAC 5-50-90 and 9 VAC 5-80-110 C)
4. The throughput of rough lumber shall not exceed  $32 \times 10^6$  board feet per year, calculated as the sum of each consecutive 12 month period, and 7,680 board feet per hour. Hourly throughput shall be determined by dividing monthly throughput by monthly hours of operation.  
(9 VAC 5-80-1180, 9 VAC 5-80-110, and Condition 13 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
5. Emissions from the operation of the woodworking equipment (W1) at the plant as exhausted from the baghouses shall not exceed the limits specified below:

Particulate Matter	0.01 gr/dscf	3.0 tons/yr
PM-10	0.01 gr/dscf	3.0 tons/yr

The tons/yr emissions are derived from the estimated overall emission contribution. Annual emissions shall be calculated as the sum of each consecutive 12-month period. Compliance with these limits shall be determined as stated in Conditions IV.A.1, IV.A.2, and IV.A.4, or as demonstrated by performance testing or monitoring. (9 VAC 5-50-260, 9 VAC 5-80-110 B, and Condition 31 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

6. Visible emissions from the fabric filter exhausts shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction. (9 VAC 5-50-20, 9 VAC 5-50-80, 9 VAC 5-80-110 K, and Condition 25 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
7. Visible emissions from any fugitive emission points shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction. (9 VAC 5-50-90 and 9 VAC 5-80-110 K)

#### **B. Monitoring and Recordkeeping**

1. An annual inspection shall be conducted on all cyclones and fabric filters by the permittee to insure structural integrity. The permittee shall record:
  - a. The date of each inspection;
  - b. The results of each inspection; and
  - c. The maintenance performed, if required.(9 VAC 5-80-110)
2. The permittee shall perform a visible emission observation on the fabric filter exhausts once each day when the units are operated for a period of time exceeding the time required for normal start-up. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If during the evaluation, visible emissions are observed, the company shall take timely corrective actions such that no visible emissions are present. If excess emissions are expected for greater than one hour, DEQ malfunction procedures shall be implemented. (9 VAC 5-80-110 K)
3. Emission monitoring and recordkeeping not otherwise required by this permit shall consist of the following operating data:
  - a. The monthly and yearly throughput of lumber (expressed in board feet) processed by woodworking equipment. Annual throughput shall be calculated as the sum of each consecutive 12 month period.



- b. The number of hours per month of operation of the woodworking equipment (W1).
- c. Daily fabric filter exhaust inspection records.
- d. The log of annual inspections for the cyclone and fabric filters.
- e. Hourly, monthly, and annual emission estimates based on approved emission factors and lumber throughput. Hourly emissions shall be determined by dividing monthly emissions by hours of operation of woodworking equipment.

The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 F, and Condition 34 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

4. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the baghouses BH1 – BH7 controlling woodworking operations according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Daily visible emissions checks through Method 22-like procedures, with results recorded daily.	Check for presence of visible emissions.	Instantaneous observation of visible emission.
Annual internal baghouse inspections.	Internal baghouse inspection by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Air flow restrictions affecting proper operation of baghouse.

5. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.  
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))
6. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (b))

7. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the baghouses are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions. (9 VAC 5-80-110 E and 40 CFR 64.7 (c))
8. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the baghouses to normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
9. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
10. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and

collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-110 E and 40 CFR 64.7(e))

11. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 6 for the baghouses for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

- a. Improved preventative maintenance practices;
- b. Process operation changes;
- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.

(9 VAC 5-80-110 E (Article 1) and 40 CFR 64.8(a) and (b))

12. **Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9 VAC 5-80-110 E and 40 CFR 64.9(b))

### C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 12 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)

#### **D. Reporting**

1. **Compliance Assurance Monitoring (CAM) Reporting** - the permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Director, Southwest Regional Office. Such reports shall include at a minimum:
  - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.  
(9 VAC 5-80-110 F and 40 CFR 64.9(a))

#### **V. Wood Drying Equipment Requirements – (D1 & D2)**

##### **A. Limitations**

1. The wood drying operations (D1 & D2) shall process no more than  $32 \times 10^6$  board feet of lumber per year, calculated as the sum of each consecutive 12 month period.  
(9 VAC 5-80-1180, 9 VAC 5-80-110 A, 9 VAC 5-80-110 B, and Condition 13 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. Total Emissions from the operation of the wood drying kilns and predryers (D1 & D2) shall not exceed the limits specified below:

Volatile Organic Compounds

5.4 tons/yr

Annual emissions shall be calculated as the sum of each consecutive 12-month period.  
(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-110 B, and Condition 32 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

3. Visible emissions from the dry kilns and predryers (D1 & D2) shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-50-80 and 9 VAC 5-80-110 K)

**B. Monitoring and Recordkeeping**

1. Emission monitoring, recordkeeping and reporting not otherwise required by this permit shall consist of the following operating data:
  - a. The yearly throughput of lumber in board feet, calculated as the sum of each consecutive 12 month period.
  - b. The ratio of hardwood/softwood used during the 12 month period referenced above.
  - c. Annual VOC emission estimates based on approved emission factors and lumber throughput, calculated as the sum of each consecutive 12 month period.

The content of and format of such records shall be arranged with the Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-50-50, 9 VAC 5-80-110 F, and Condition 34 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

**C. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 12 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)

**VI. Furniture Finishing Equipment Requirements – (F1)**

**A. Limitations**

1. Particulate matter emissions from the spray booths (F1) shall be controlled by Columbus Industries Supra II Mini Mesh dry filters, or equivalent, on each spray booth. The filters and spray booths shall be provided with adequate access for inspection.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-80-110 C, and Condition 2 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

2. Particulate matter emissions from the Automatic Door Wiping Station (F1) shall be controlled by a dry filter system. The dry filter system shall be provided with adequate access for inspection.  
(9 VAC 5-80-10 H, 9 VAC 5-50-260, and Condition 4 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
3. VOC emissions from the two topcoat booths and two sealer booths shall be controlled by a regenerative thermal oxidizer (RTO). The RTO shall be provided with adequate access for inspection and shall be in operation when the topcoat booths are operating.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 7 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
4. The approved fuel for the RTO is natural gas. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-1180 and Condition 16 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
5. The RTO shall demonstrate control efficiency by stack test for VOC of no less than 95 percent, on a mass basis.  
(9 VAC 5-50-260 and Condition 8 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
6. The enclosure to the two topcoat booths (including flash areas and dryer) and two sealer booths shall have a capture efficiency of 95 percent as determined by an approved negative pressure enclosure procedure, or alternative methods as approved by the DEQ.  
(9 VAC 5-50-260 and Condition 9 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
7. When the two topcoat booths and two sealer booths are in operation, the combustion temperature (3-hour average) in the RTO shall not be more than 50°F below the average temperature during the most recent emission test that demonstrated compliance.  
(9 VAC 5-50-260 and Condition 10 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
8. Visible emissions from the RTO exhaust shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-260 and Condition 21 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

9. Visible emissions from the spray booth, flash area, automatic wiping station vacuum pump, and drying oven exhausts (F1) shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction (9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-80-110 K, and Condition 22 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
10. The total throughput of VOC to the cabinet door finishing operations shall not exceed the quantity required to satisfy the equation below:

$$X + Y(1 - OCE_{Topcoat}/100) + Z(1 - OCE_{Sealer}/100) \leq 455.2 \text{ tons/yr}$$

where:

X = VOC throughput to uncontrolled operations

Y = VOC throughput to two controlled topcoat spray booths

OCE<sub>Topcoat</sub> = overall VOC control efficiency of two topcoat booths (capture & control  $\geq 90\%$ )

Z = VOC throughput to two controlled sealer spray booths

OCE<sub>Sealer</sub> = overall VOC control efficiency of two sealer booths (capture & control  $\geq 60\%$ )

Total VOC throughput shall be calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-50-260, 9 VAC 5-80-1180, and Condition 26 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

11. Emissions from the operation of the RTO shall not exceed the limits specified below:

Carbon Monoxide	0.4 lbs/hr	1.3 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	0.3 lbs/hr	1.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number VI.A.4.

(9 VAC 5-50-260 and Condition 27 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

12. Pollutant emissions from the operation of the spray booths and cabinet door finishing operations shall not exceed the limitations specified below:

Particulate Matter	0.5 lbs/hr	0.6 tons/yr
PM10	0.5 lbs/hr	0.6 tons/yr
Volatile Organic Compounds	374.2 lbs/hr	455.2 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-1180, and Condition 28 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

**B. Monitoring and Recordkeeping**

1. The RTO shall be equipped with a continuous temperature measuring and recording device. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the topcoat booths and RTO are operating. The temperature records shall be available for inspection.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 11 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. The permittee shall perform a visible emission observation on the RTO, spray booth, flash area, automatic wiping station vacuum pump, and drying oven exhausts once each calendar week when the units are operated for a period of time exceeding the time required for normal start-up. Each visible emissions observation shall be performed for a sufficient period of time to identify the presence of visible emissions. If during the evaluation, visible emissions are observed, a visible emissions evaluation (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9 shall be conducted. The VEE shall be conducted for a minimum period of six (6) minutes. If any of the observations exceed the applicable opacity limit, the observation period shall continue until a total of sixty (60) minutes of observation has been completed. A Method 9 evaluation shall not be required if the visible emissions condition is corrected in a timely manner such that no visible emissions are present; the emissions unit is operating at normal operating conditions; and the cause and corrective measures taken are recorded. If excess emissions are expected for greater than one hour, DEQ malfunction procedures shall be implemented.  
(9 VAC 5-50-20, 9 VAC 5-50-260, and 9 VAC 5-80-110 K)
3. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the RTO controlling the two topcoat and two sealer spray booths according to the following:



Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Continuous temperature monitor.	Check temperature to determine RTO performance.	Average hourly temperature no more than 50°F below performance test temperature. If temperature is more than 50°F below test temperature, 3-hour average temperatures are calculated to determine excursions more than 50°F below test temperature.
Annual burner inspection and records of observations.	Burner inspection by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Observations of corrosion, mechanical failure, obstruction, etc.

4. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.  
 (9 VAC 5-80-110 E and 40 CFR 64.6 (c))
5. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
 (9 VAC 5-80-110 E and 40 CFR 64.7 (b))
6. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the RTO is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.  
 (9 VAC 5-80-110 E and 40 CFR 64.7 (c))

7. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the RTO to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
8. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.  
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
9. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-110 E and 40 CFR 64.7(e))
10. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 6 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
  - a. Improved preventative maintenance practices;
  - b. Process operation changes;

- c. Appropriate improvements to control methods;
  - d. Other steps appropriate to correct control performance; and
  - e. More frequent or improved monitoring.
- (9 VAC 5-80-110 E (Article 1) and 40 CFR 64.8(a) and (b))

11. **Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (9 VAC 5-80-110 E and 40 CFR 64.9(b))

### C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 12 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
2. The permittee shall conduct performance tests for volatile organic compounds to and from the RTO to demonstrate compliance with control and capture efficiency requirements contained in Conditions VI.A.5 and VI.A.6 of this permit. Tests shall be conducted on an on-going basis no less frequent than once in every five year period after the date of the previous performance test. More frequent testing may be required if any test results do not demonstrate compliance with the requirements contained in Conditions VI.A.5 or VI.A.6 of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. Control efficiency testing shall be conducted according to 40 CFR 60, Appendix A, Methods 25, 25A, or 25B (including a determination of volumetric air flow). Capture efficiency testing shall be conducted according to an approved negative pressure enclosure procedure, or using alternative methods as approved by the Director, Southwest Regional Office. The details of the tests shall be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-50-30, 9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-80-1200, and Condition 35 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)

3. Concurrently with the abovementioned performance tests, visible emission evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the RTO exhausts. Each test shall consist of ten sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests shall be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Should conditions prevent concurrent opacity observations, the Director, Southwest Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the prior performance tests. One copy of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30, 9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-80-1200, and Condition 36 of the Minor NSR permit issued October 6, 2008 as amended January 4, 2011)
4. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)

#### **D. Reporting**

1. **Compliance Assurance Monitoring (CAM) Reporting** - the permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Director, Southwest Regional Office. Such reports shall include at a minimum:
    - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
    - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
    - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
- (9 VAC 5-80-110 F and 40 CFR 64.9(a))

## **VII. MACT Requirements**

Except as specified in this permit, the facility is to be operated in compliance with Federal requirements under 40 CFR 63, Subparts A, JJ, DDDD, and DDDDD. Subpart JJ (National Emission Standards for Furniture Manufacturing Operations) is applicable to the finishing operations. Subpart JJ applicable requirements are identified below. Subpart DDDD (National Emission Standards for Plywood and Composite Wood Products) contains applicable requirements based on the operation of lumber dry kilns. The initial notification requirements of 40 CFR 63.2252 have been met. Subpart DDDDD (National Emission Standards for Industrial/Commercial/Institutional Boilers and Process Heaters) is applicable to the facility, unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the first substantive compliance date.

(9 VAC 5-60-20, 40 CFR 63.800, 40 CFR 63 Subpart A, 40 CFR 63.2231(a), and 40 CFR 63.7490(a))

### **MACT DDDDD Applicability**

Emission units B1 and B2 are subject to 40 CFR Part 63, Subpart DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP (Boiler MACT)), unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the first substantive compliance date.

(40 CFR 63.7490(a))

### **MACT JJ Requirements**

#### **A. Emission Standard**

1. Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits;
2. For finishing operations use any of the following methods;
  - a. Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
  - b. Use compliant finishing materials that meet the following specifications:
    - (1) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
    - (2) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
    - (3) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (5) of this sub-section;

- (4) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
  - (5) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;
  - c. Use a control device which must operate at an efficiency that is equivalent to no greater than 1.0 lb of VHAP being emitted per lb of solids used;
  - d. Use any combination of averaging, compliant coatings, and control device such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;
  - 3. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;
  - 4. For contact adhesive operations use either of the following methods;
    - a. Compliant contact adhesives shall be used based on the following criteria;
      - (1) For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
      - (2) For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;
      - (3) For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied;
    - b. Use a control device which must operate at an efficiency that is equivalent to no greater than 1.0 lb of VHAP being emitted per lb of solids used.
- (9 VAC 5-60-20 and 40 CFR 63.802)

#### **B. Continuous Compliance**

Continuous compliance with the VHAP emissions limits shall be determined as follows:  
(See Conditions VII.H and VII.I for content and timing of report submissions and signature requirements)

- 1. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the

standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + \dots + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + \dots + S_nW_n) / (M_{c1} + M_{c2} + \dots + M_{cn})$$

..... Equation 1

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.

M<sub>c</sub> = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.

C<sub>c</sub> = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M<sub>c</sub> in lb solids / month) multiplied by the VHAP content in each material (C<sub>c</sub> in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M<sub>c</sub> in lb solids / month).

2. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition VII.A, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
3. For finishing operations when compliant coatings are being used to show continuous compliance and the coatings are being applied using continuous coaters, the permittee shall demonstrate continuous compliance by either of the following:
  - a. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, use compliant

thinners, and submit a compliance certification with the semiannual report which states that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

- b. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir, use compliant thinners, maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintain records of solvent additions, and submit a compliance certification with the semiannual report which states that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The facility is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.
4. For contact adhesive operations when compliant adhesives are being used to show initial compliance, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
5. For strippable spray booth coatings, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
6. For work practice standards, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during



any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition VII.F.1).

(9 VAC 5-60-20, 40 CFR 63.804(g), and 40 CFR 63.8)

**C. Testing**

If compliance testing is conducted the tests shall be conducted using the test methods and procedures as specified in 40 CFR 63.805 of Subpart JJ.

(9 VAC 5-60-100, 40 CFR 63.805)

**D. Submittals**

All submittals to the Administrator shall be sent to EPA Region III at the following address:

U.S. EPA Region III  
Air Protection Division (3AP00)  
ATTN: Wood Furniture NESHAP Coordinator  
1650 Arch Street  
Philadelphia, PA 19103-2029

Copies of all submittals should also be sent to the Director, Southwest Regional Office.  
(9 VAC 5-60-100 and 40 CFR 63.13)

**E. Operation and Maintenance**

The permittee shall meet the following operation and maintenance requirements:

1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
2. Malfunctions shall be corrected as soon as practicable after their occurrence.
3. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
4. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9 VAC 5-60-100 and 40 CFR 63.6(e))

**F. Work Practice Standards**

The permittee shall develop and implement the following work practice standards:

1. Work practice implementation plan - The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions 2 through 12 that follow. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
2. Operator training course - The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
  - a. A list of all current personnel by name and job description that are required to be trained;
  - b. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
  - c. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
  - d. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
3. Inspection and maintenance plan - The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
  - a. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
  - b. An inspection schedule;

- c. Methods for documenting the date and results of each inspection and any repairs that were made;
- d. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
  - (1) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
  - (2) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- 4. Cleaning and washoff solvent accounting system - The permittee shall develop an organic HAP solvent accounting form to record:
  - a. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of Subpart JJ;
  - b. The number of pieces washed off, and the reason for the washoff; and
  - c. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- 5. Chemical composition of cleaning and washoff solvents - The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ (see attached), in concentrations subject to MSDS reporting as required by OSHA.
- 6. Spray booth cleaning - The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- 7. Storage requirements - The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- 8. Application equipment requirements - The permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
  - a. To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;

- b. For touchup and repair under the following conditions:
  - (1) The touchup and repair occurs after completion of the finishing operation; or
  - (2) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
- c. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
- d. When emissions from the finishing application station are directed to a control device;
- e. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
- f. The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic infeasibility:
  - (1) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
  - (2) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- 9. Line cleaning - The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- 10. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- 11. Washoff operations - The permittee shall control emissions from washoff operations by:
  - a. Using normally closed tanks for washoff; and

- b. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

12. Formulation assessment plan for finishing operations - The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

- a. Identifies VHAP from the list presented in Table 5 of Subpart JJ (see attached) that are being used in finishing operations;
- b. Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by §63.803 (1)(2). Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system. For VHAPs that do not have a baseline, one will be established according to Condition f below.
- c. Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.
- d. If the annual usage of the VHAP identified exceeds its baseline level, then the permittee of the facility shall provide a written notification to the Director, Southwest Regional Office and the Administrator that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
  - (1) The exceedance is no more than 15.0 percent above the baseline level;
  - (2) Usage of the VHAP is below the de minimis level presented in Table 5 for that VHAP;
  - (3) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
  - (4) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
- e. If none of the explanations listed in Condition d above is the reason for the increase, the permittee shall confer with the Director, Southwest Regional Office and the Administrator to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on

cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Director, Southwest Regional Office and the Administrator and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

- f. If the facility uses a VHAP of potential concern listed in Table 6 of Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of Subpart JJ for that chemical, then the permittee shall provide an explanation to the Director, Southwest Regional Office and the Administrator that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in Condition d above, the affected source shall follow the procedures established in Condition e above.

(9 VAC 5-60-100 and 40 CFR 63.803(a)-(l))

#### **G. Recordkeeping**

The permittee shall maintain records of the following:

1. For emission limit purposes the permittee shall maintain the following:
  - a. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Subpart JJ,
  - b. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Subpart JJ; and
  - c. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ.
2. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.

3. Following the continuous coating operations, where viscosity is being used to determine compliance, the permittee shall maintain the records required by Condition 1 above as well as the following:
  - a. Solvent and coating additions to the continuous coater reservoir;
  - b. Viscosity measurements; and
  - c. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.
4. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
  - a. Records demonstrating that the operator training program required by Condition VII.F.2 is in place;
  - b. Records collected in accordance with the inspection and maintenance plan required by Condition VII.F.3;
  - c. Records associated with the cleaning solvent accounting system required by Condition VII.F.4;
  - d. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition VII.F.8;
  - e. Records associated with the formulation assessment plan required by Condition VII.F.12; and
  - f. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
  - g. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
  - h. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
  - i. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be

retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(9 VAC 5-60-100 and 40 CFR 63.806 & 63.10(b)(1))

#### **H. Notification of Compliance**

Each time a notification of compliance status is required, the permittee shall submit to the appropriate Director, Southwest Regional Office and/or the Administrator a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with Subpart JJ. The notification shall list:

1. The methods that were used to determine compliance;
2. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
3. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
4. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
5. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);
6. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
7. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.

(9 VAC 5-60-100 and 40 CFR 63.9(h))

#### **I. Reporting**

Reporting not otherwise required by this permit shall consist of the following:

1. The permittee when demonstrating continuous compliance shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
  - a. The time periods to be addressed are January 1 to June 30 and July 1 to December 31 of each calendar year. The respective reports shall be submitted no later than March 1 and September 1 of each calendar year.



- b. The semiannual reports shall include the information required by Condition VII.B, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
  - c. The frequency of the reports required by Condition 1 above shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
2. The permittee, when required to provide a written notification by Condition VII.F.12.d(4) for exceedance of a baseline level, shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.
- (9 VAC 5-60-100 and 40 CFR 63.807 & 63.10(d))

### VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity 9 VAC 5-80-720 C)
AMS1	Gas-fired air makeup system rated at 8.25 MMBtu/hr heat input (plant ventilation)	9 VAC 5-80-720 A.2 & A.3		
AMS2	Gas-fired air makeup system rated at 19.25 MMBtu/hr heat input (plant ventilation)	9 VAC 5-80-720 A.2 & A.3		
PW1	Parts Washer	9 VAC 5-80-720 B	VOC	
STs	Storage Tanks	9 VAC 5-80-720 B	VOC	
G1	Wood Gluing	9 VAC 5-80-720 B	VOC	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## **IX. Permit Shield & Inapplicable Requirements**

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
		No inapplicable requirements were identified

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

## **X. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
  3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
  4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
  5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
- (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### **C. Recordkeeping and Reporting**

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
    - a. The date, place as defined in the permit, and time of sampling or measurements.
    - b. The date(s) analyses were performed.
    - c. The company or entity that performed the analyses.
    - d. The analytical techniques or methods used.
    - e. The results of such analyses.
    - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
  - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

#### **D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov  
(9 VAC 5-80-110 K.5)

#### **E. Permit Deviation Reporting**

The permittee shall notify the Director, Southwest Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.  
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

#### **F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days

of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.  
(9 VAC 5-20-180 C)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records

required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.  
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.  
(9 VAC 5-80-110 K.1)

#### **M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.  
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

#### **N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

**O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

**P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.



1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

**S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

**T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)

**U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
    - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
    - b. The permitted facility was at the time being properly operated.
    - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
    - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
  3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
  4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
- (9 VAC 5-80-250)

#### **V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

**W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

**X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

**Y. Asbestos Requirements**

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

**Z. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

**AA. Changes to Permits for Emissions Trading**

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

**BB. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.  
(9 VAC 5-80-110 I)